



Model 800-EFM External Feature Module

User's Guide



Note: The 800-EFM External Feature Module can be set as a music on hold adapter, external paging adapter, or a door intercom adapter

Please read before using feature module.

Getting Started

Getting Started

Congratulations! You've purchased a *TMC Model 800-EFM External Feature Module* that meets the highest standards for quality and convenience in the Small Office/Home Office environment. To get the most from your Feature Module, please take time to read this guide thoroughly.

IMPORTANT SAFETY INSTRUCTIONS

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- 1. Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- 2. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- 3. Do not use the telephone to report a gas leak in the vicinity of the leak.
- 4. Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.
- 5. \(\text{\text{\$\subset}}\) Use only the class 2 power adapter 12VDC 500 mA.

SAVE THESE INSTRUCTIONS

Getting Started

Before you begin . . .

The **TMC Model 800-EFM External Feature Module** is designed for easy installation in your home or office. However, it is important that you follow these few simple guidelines:

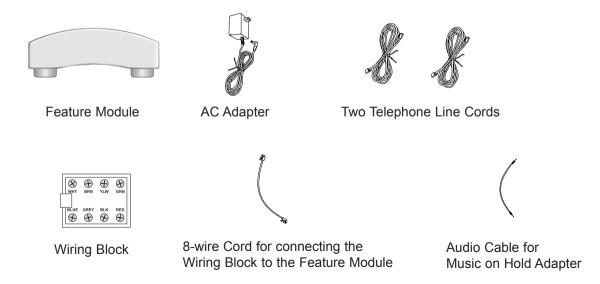
- Take a few minutes to read this manual so that you thoroughly understand the instructions to be followed for proper installation of your *Feature Module*.
- This User's Guide provides easy to understand directions for operation of your Feature Module. Please retain these instructions for future reference.

The Model 800-EFM External Feature Module offers ONE of the following features, which you decide by setting switches on the module: External Paging Adapter, Door Intercom Adapter, or Music on Hold Adapter. If you ever need more than one of these features, you must buy additional modules and set each one separately.

For setting this Module as an External Paging Adapter, please refer to sections 1A and 1B. For setting this Module as an Door Intercom Adapter, please refer to sections 2A and 2B. For setting this Module as a Music on Hold Adapter, please refer to sections 3A and 3B.

Packing List

Remove the unit from the package and check this list to be certain all parts are included:



To order any packing list items, call toll-free 1-800-TMC-1638.

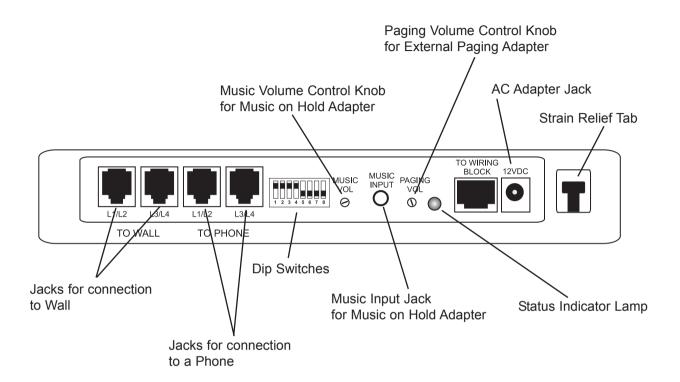
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Reference Drawing



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Section

1A

Installing
Your
External
Paging Adapter

Step 1: Connect Line Cord

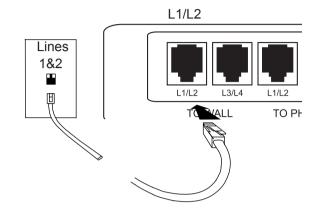
1 Connect Line Cord

Connect one end of a long telephone line cord to the jack on the back of the feature module labeled L1/L2. Connect the other end to a jack labeled Lines 1 & 2 or to a jack labeled line 1.

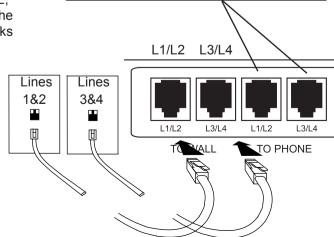
PLEASE NOTE: You must be sure to connect the cord to LINE 1. It does not matter if it is also connected to line 2.

Note also that you can install your feature module into a jack that is already being used by another device. Simply unplug the other device from the wall jack and plug it into the corresponding jack on the feature module labeled "TO PHONE." Then connect a line cord from the wall jack to the corresponding jack on the feature module labeled "TO WALL."

IMPORTANT NOTE: If you connect both the L1/L2 and L3/L4 line cords from a device to the jacks on the module labeled "TO PHONE," then you MUST connect both the L1/L2 and the L3/L4 line cords from the wall jacks to the jacks on the module labeled "TO WALL."



If you wish to plug in the module to a jack that is already in use, unplug the existing device from the wall jacks, connect both of the line cords to the module as shown, and then plug the device into the jacks on the module labeled "TO PHONE."



Step 2: Set DIP Switches to Proper Positions

Set Switches 7-8

Set switch 7 in the up position and switch 8 in the down position to set this feature module as an External Paging Adapter.

1 2 3 4 5 6 7 8

IMPORTANT: Make sure that switch 7 is set in the up position and switch 8 is set in the down position.

Set Switch 5

The setting of this DIP switch determines whether your External Paging Adapter will accept or block All Pages.

If you want to be able to make announcements through this speaker, but do not want general voice pages to be heard through this speaker, you must set this DIP switch in the down position.



Set switch 5 in the up position to set this External Paging Adapter to allow All Pages



Set switch 5 in the down position to set this External Paging Adapter to block All Pages

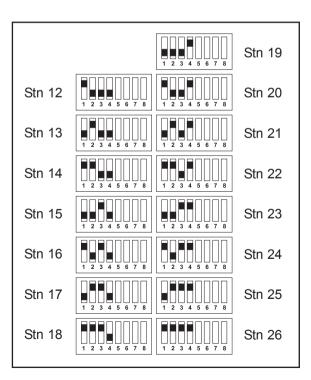
Set Switches 1-4

The setting of these four DIP switches determines what station number your External Paging Adapter will be set as.

You may choose any station number from 12 to 26. Note that you may not set your External Paging Adapter as station #11.

Also please note that you must not assign your External Paging Adapter the same station number as any of your phones or other feature modules. IT MUST BE ASSIGNED ITS OWN UNIQUE STATION NUMBER.

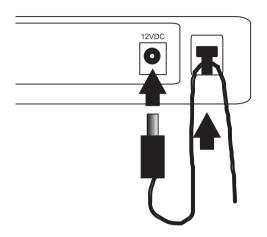
Refer to the drawing at right to determine how to set the DIP switches for the station number you choose.



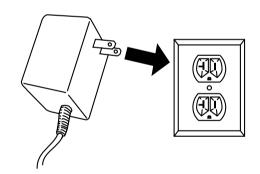
Step 3: Connect Power Cord

1 Connect Power Cord to Module

Plug the AC power cord into the adapter jack at the rear of the Feature Module. Thread the power cord around the strain relief tab.



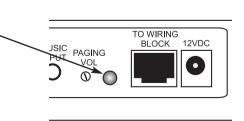
2 Connect Power Cord to Wall Outlet Plug the AC adapter into an electrical outlet not controlled by a wall switch.



3 Make Sure that Status Indicator lamp is Blinking

This indicates that the feature module is properly connected to electrical power.

The blinking pattern for the External Paging Adapter is two blinks every few seconds.



Step 4: Connect Wiring Block to External Paging Adapter

1 Locate 8-wire Cord

Find the 8-wire cord which was enclosed with your External Paging Adapter. Note that this is a black cord which is approximately 6 inches long.

Note that you must use this cord, as any other cord may not work.

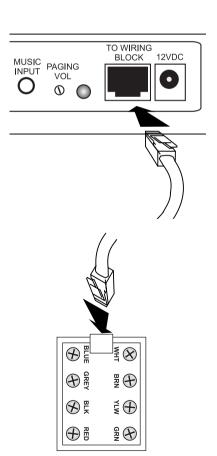


2 Connect Cord to Feature Module

Plug one end of the 8-wire cord into the jack on the back of your External Paging Adapter labeled "TO WIRING BLOCK."

3 Connect other end of Cord to Wiring Block

Plug the other end of the 8-wire cord into the wiring block which was supplied with your feature module.



Step 5: Connect Amplifier and Speaker to Wiring Block

1 Install Amplifier and Speaker

Please follow the installation instructions that came with your amplifier and speaker.

Note that you may be installing a speaker with a built-in amplifier. These are called "amplified speakers" or "self-powered speakers". In this case you would not need an external amplifier.

2 Connect Wiring Block to Input of Amplifier

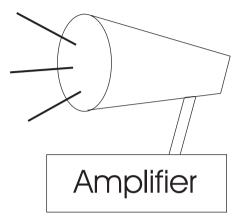
Connect the input of the amplifier to the indicated screw terminals on the wiring block.

Note that if the input level of the amplifier is less than -25dBm, you should connect the amplifier to the BLUE and BLACK wires. If the input level of the amplifer is greater than -25dBm, you should connect the amplifier to the WHITE and BROWN wires.

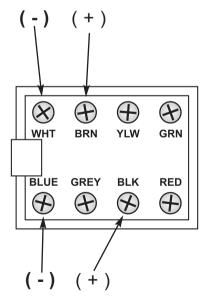
Note that if you have connected a self-amplified speaker, you would of course be connecting these terminals directly to the speaker.

Note that TMC does not include any cables for connecting the wiring block to the amplifier. This is because different amplifiers have many different types of input connectors. Some have RCA jacks, some have 1/8" jacks, some have screw terminals, and so on. Connector cables are sold many places, for example Radio Shack. (For instance their RCA plug to lug connector is part #42-2450, their 1/8" plug to lug connector is part #42-2454, and their lug to lug connector is part #42-2446.)

TMC recommends Valcom model V-1030C self-amplified speaker. This model expects input level from -15dBm to 10dBm. Therefore you would connect this model to the WHITE and BROWN wires.



Connect these terminals to the external paging amplifier if input level is greater than -25dBm

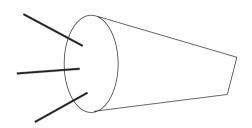


Connect these terminals to the external paging amplifier if input level is less than -25dBm

Step 6: Adjust Speaker Volume to Desired Level

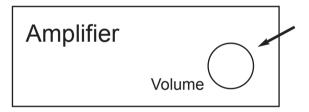
1 Listen to Speaker Volume

At the System phone nearest the External Paging Adapter, make an announcement through that external speaker (see page 10 for instructions on doing this). Listen to the volume of your announcement through the speaker, or ask someone else to make the announcement while you listen to the volume level



2 Adjust the Volume of the Speaker

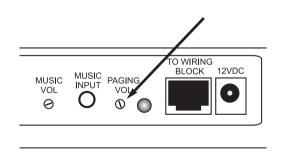
Use the volume control knob on the amplifier to achieve your desired speaker volume. Note that if your speaker has a built-in amplifier, the volume control knob may be on the speaker itself.



3 If Necessary, use the Feature Module's Volume Control Knob

If you find that you cannot achieve the desired volume level by adjusting the volume of the amplifier (or self-amplified speaker), then use the paging volume control on the rear of the Feature Module. Using a small screw driver, turn the knob in a clockwise direction to increase the volume level, or counter-clockwise to decrease the volume.

Note: This paging volume control on the module is only active when the amplifier is connected to the blue and black terminals.



Page Operation of your External Paging Adapter In Important Points to Note Troubleshooting Guide Using Your External Paging Adapter Adapter

Operation of your External Paging Adapter

To make an announcement through a particular external speaker:

- **1** Press PAGE.
- **2** Dial the two-digit station number of the speaker you wish to page.
- 3 After you hear the paging tone, speak towards the telephone or lift the handset to make your announcement.
- 4 Replace the handset in the cradle or press the SPEAKER button to hang up.

You may connect as many External Paging Adapters to your system as you like. Connect each one to a separate amplifier and speaker and assign each a different station number from 12 to 26 (See page 3)

When you wish to make an announcement through a particular external speaker, simply press the PAGE, then dial the two-digit station number of that external paging adapter.

To make an All Page:

- 1 Press the PAGE button twice.
- **2** After you hear the paging tone, speak towards the telephone or lift the handset to make your announcement.
- 3 Replace the handset in the cradle or press the SPEAKER button to hang up.

The All Page feature enables you to make announcements through all of the other system stations, as well as through all external paging adapters you have connected to your system.

When you make an All Page, your announcement will be heard at all phones that are not in use and do not have their DO NOT DISTURB or Page Block activated. In addition, your announcement will be heard through all external speakers connected to external paging adapters that do not have their Page Block activated.

Note: If you do not want All Pages to be heard through a particular external speaker, you must activate that external paging adapter's page block by setting its Dip switch 5 in the down position (see page 3).

Important Points to Note

You must attach your External Paging Adapter to line 1 for it to function.

You may connect up to 15 External Paging Adapters to your system. Connect each one to a separate External Paging speaker and assign each one a different station number from 12 to 26.

You must assign each external paging adapter its own unique station number, and you must make sure that you have not assigned the same station number to another system telephone, another external paging adapter or to any other feature module.

If you cannot achieve the desired volume level by adjusting your amplifier, you may use the volume control on the back of the adapter. Turn the knob clockwise to increase volume level.

Note that TMC does not include any cables for connecting the wiring block to the amplifier. This is because different amplifiers have many different types of input connectors. Some have RCA jacks, some have 1/8" jacks, some have screw terminals, and so on. You must buy the appropriate connector cable based on the type of connection of your amplifier or amplified speaker. Connector cables are sold many places, for example Radio Shack. (For instance their RCA plug to lug connector is part #42-2454, and their lug to lug connector is part #42-2454.)

Troubleshooting Guide

If you are having difficulty with your External Paging Adapter, **DO NOT RETURN IT!** You may find your problem and solution listed below. If not, call TMC's toll-free customer support line at 1-800-TMC-1638, and an expert will walk you through your problem. You may also use this toll-free line if you ever have a question that is not answered in your User's Guide.

The Feature Module does not work.	Check all connections and make sure that they are securely in place. Check to make sure that the status indicator lamp is blinking . If it is not, unplug and then replug the AC power cord. If the status indicator still fails to start blinking, check your wall jack by plugging another device such as a lamp into the outlet to make sure that the outlet is working properly. Check to be sure that the feature module is connected to the System's line 1 telephone number.
The Feature Module is connected properly, but the external speaker does not work.	The problem may be with the telephone wiring: If possible, check your jack wiring by testing a telephone at the jack where you installed the Feature Module. If this standard telephone does not work, then local telephone company lines or your own wiring may be causing the prob- lem.
	The problem may be with your external speaker: Check to make sure that it is connected to an amplifer and that the amplifier is connected to the AC power. Make sure that it is connected properly to the wiring block (see page 5), and make sure that the wiring block is securely connected to the External Paging Adapter with the included 8-wire cord.
When you connect your External Paging Adapter, the station is not assigned as you wish, or Page Block is not set as you would wish.	The problem may be with the DIP Switch settings on the back of the module: Please confirm that the DIP Switches on the back of the External Paging Adapter are set properly. Refer to page 3 for instructions on setting them properly.
Other problems.	Make sure that you have followed the instructions in this User's Guide. If you continue to have problems, call TMC's toll-free customer support line at 1-800-TMC-1638.

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Section

2A

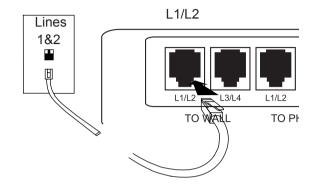
Installing Your Door Intercom Adapter

Step 1: Connect Line Cord

1 Connect Line Cord

Connect one end of a long telephone line cord to the jack on the back of the feature module labeled L1/L2. Connect the other end to a jack labeled Lines 1 & 2 or to a jack labeled line 1.

PLEASE NOTE: You must be sure to connect the cord to LINE 1. It does not matter if it is also connected to line 2.



Step 2: Set DIP Switches to Proper Positions

Set Switches 7-8

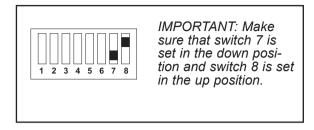
Set switch 7 in the down position and switch 8 in the up position to set this feature module as a Door Intercom Adapter.

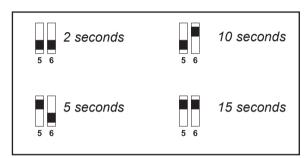
Set Switches 5-6 (Optional)

The setting of these DIP switches determines how many seconds the magnetic door strike will remain unlocked when you unlock it from one of your system phones.

You may choose either 2 seconds, 5 seconds, 10 seconds, or 15 seconds.

Note that you only need to be concerned with this setting if you plan to connect a magnetic door strike to this Door Intercom Adapter.

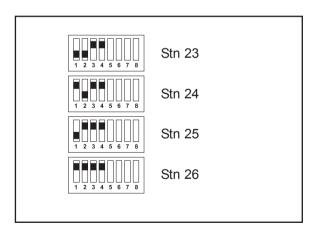




Set Switches 1-4

The setting of these four DIP switches determines what station number your Door Intercom Adapter will be set as.

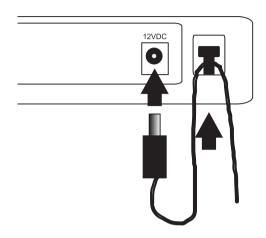
You may choose to set this Door Intercom Adapter as either station #23, #24, #25, or #26.



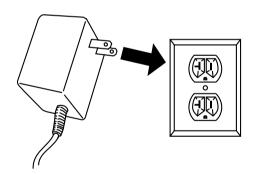
Step 3: Connect Power Cord

1 Connect Power Cord to Module

Plug the AC power cord into the adapter jack at the rear of the Feature Module. Thread the power cord around the strain relief tab.



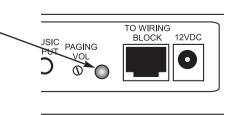
2 Connect Power Cord to Wall Outlet Plug the AC adapter into an electrical outlet not controlled by a wall switch.



3 Make Sure that Status Indicator lamp is Blinking

This indicates that the feature module is properly connected to electrical power.

The blinking pattern for the Door Intercom Adapter is a slow on and off blinking.



Step 4: Connect Wiring Block to Door Intercom Adapter

1 Locate 8-wire Cord

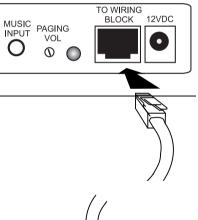
Find the 8-wire cord which was enclosed with your Door Intercom Adapter. Note that this is a black cord which is approximately 6 inches long.

Note that you must use this cord, as any other cord may not work.



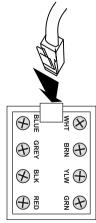
2 Connect Cord to Feature Module

Plug one end of the 8-wire cord into the jack on the back of the feature module labeled "TO WIRING BLOCK"



3 Connect other end of Cord to Wiring Block

Plug the other end of the 8-wire cord into the wiring block which was supplied with your feature module.

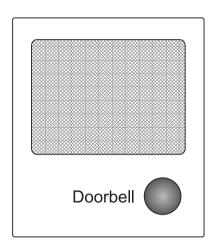


Step 5: Connect Door Speaker to Wiring Block

1 Install Door Speaker

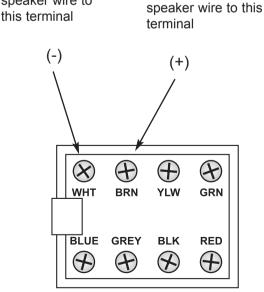
Please follow the installation instructions that came with your door speaker.

Note that TMC Corporation does not manufac-The Door Intercom ture door speakers. Adapter has been designed and tested to be compatible with NuTone brand door speakers (such as models ISB-64 or IS-69). The Door Intercom Adapter may possibly work with other brands of door speaker, but has not been tested for compatibility with any other brands.



2 Connect Speaker Wires to Wiring **Block**

Connect the two speaker wires to the indicated screw terminals on the wiring block. Note that these are the terminals with the brown wire and the white wire



Connect the other

Connect one

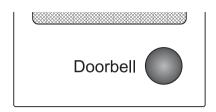
speaker wire to

Step 6: Connect Doorbell to Wiring Block

1 Install Doorbell

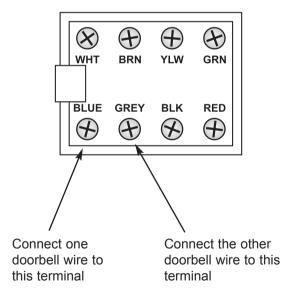
Please follow the installation instructions that came with your door speaker.

Note that the Door Intercom Adpater supports Nutone's lighted pushbutton. If your pushbutton is not lighted, you may purchase a lighted version from Nutone.



2 Connect Doorbell Wires to Wiring Block

Connect the two doorbell wires to the indicated screw terminals on the wiring block. Note that these are the terminals with the orange wire and the blue wire.

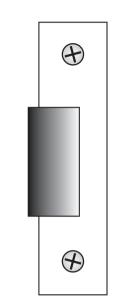


Step 7: Connect Magnetic Door Strike to Wiring Block (Optional)

1 Install Magnetic Door Strike

Please follow the installation instructions that came with your magnetic door strike.

Note that TMC Corporation does not manufacture magnetic door strikes. The Door Intercom Adapter has been designed and tested to be compatible with industry standard magnetic door strikes, which are also called magnetic door locks. Nutone is one example of a company that supplies magnetic door strikes.



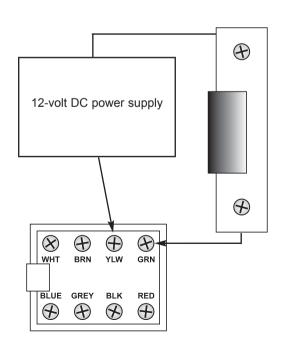
2 Connect Magnetic Strike Wires to 12-Volt Supply and to Wiring Block

Connect one magnetic strike wire to one of the indicated screw terminals on the wiring block. Note that these are the terminals with the yellow wire and the green wire.

Connect the other magnetic strike wire to one terminal of a 12-volt DC power supply, which you must provide.

Last, connect a wire from the other terminal of the 12-volt power supply to the other indicated screw terminal on the wiring block.

PLEASE NOTE THAT YOU MUST CONNECT A 12-VOLT POWER SUPPLY IN ORDER FOR YOUR MAGNETIC DOOR STRIKE TO FUNCTION. Please consult the instructions that came with your magnetic door strike for exact power specifications and amperage requirements.



Page 22 Operation of your Door Intercom Adapter 23 Important Points to Note 24 Troubleshooting Guide Using Your Door Intercom Adapter Adapter

Operation of your Door Intercom Adapter

To answer a door speaker over the intercom:

- **1** Press the INTERCOM button, then dial the two-digit station number of the desired door speaker.
- **2** To end the conversation, hang up or press the SPEAKER button.

To adjust the door intercom bell volume at your telephone:

While the phone is on-hook and idle:

- 1 Press HOLD.
- 2 Press PAGE.
- **3** Press the up and down arrows of the VOLUME button to set desired door intercom bell volume.

To unlock a magnetic door lock:

1 Press the memory button that has been made into a "key" for this door.

Note: You may press the memory button to unlock the door at any time. There is no need to be connected to the door speaker over the intercom.

You may connect up to four Door Intercom Adapters to your system. Connect each one to a separate door intercom speaker and assign each a different station number from 23 to 26 (See page 15)

When someone rings a door speaker, its corresponding station number will be shown in the display of all the phones. You may answer the door, via the intercom, from any station by pressing INTERCOM and dialing the two-digit station number of the door speaker. You may then have a two-way conversation with the person at the door.

You may set the door intercom bell volume at each phone separately. The lowest volume setting at each telephone is "OFF", so you can easily turn off the doorbell at particular telephones.

If you choose to connect a magnetic door lock to the system, you may unlock this door from any extension by pressing the memory button which has been made into a "key" for this door.

To make a memory button into a "key", press PROGRAM, then press the soft key under MEM, then press the memory button where you wish to store the door "key," then press the soft key under CHANGE, then press FLASH, then HOLD, followed by the station number of the desired door speaker (from "23" to "26"), then press the soft key under SAVE.

Important Points to Note

You must attach your Door Intercom Adapter to line 1 for it to function.

Your Door Intercom Adapter is designed to be compatible with NUTONE brand door speakers (such as model ISB-64 and model IS-69), and is also compatible with their lighted pushbutton. The Door Intercom Adapter may possibly work with other brands of door speaker, but has not been tested for compatibility with any other brands.

You may connect up to four Door Intercom Adapters to your system. Connect each one to a separate door intercom speaker and assign each one a different station number from 23 to 26.

If you install a magnetic door strike to the system, you must remember to provide your own 12 volt DC power supply to the magnetic door strike. The Door Intercom Adapter provides only the momentary closure relay, and does not itself provide any power to the magnetic door lock.

Troubleshooting Guide

If you are having difficulty with your Door Intercom Adapter, **DO NOT RETURN IT!** You may find your problem and solution listed below. If not, call TMC's toll-free customer support line at 1-800-TMC-1638, and an expert will walk you through your problem. You may also use this toll-free line if you ever have a question that is not answered in your User's Guide.

The Feature Module does not work.	Check all connections and make sure that they are securely in place. Check to make sure that the status indicator lamp is blinking . If it is not, unplug and then replug the AC power cord. If the status indicator still fails to start blinking, check your wall jack by plugging another device such as a lamp into the outlet to make sure that the outlet is working properly. Check to be sure that the feature module is con-
	nected to the System's line 1 telephone number.
The Feature Module is connected properly, but the door speaker does not work.	The problem may be with the telephone wiring: If possible, check your jack wiring by testing a telephone at the jack where you installed the Feature Module. If this standard telephone does not work, then local telephone company lines or your own wiring may be causing the prob- lem.
	The problem may be with your door speaker: Check to make sure that it is a Nutone brand door speaker of model type ISB-64 or IS-69. Make sure that it is connected properly to the wiring block (see page 19, and make sure that the wiring block is securely connected to the Door Intercom Adapter with the included 8-wire cord.
When you connect your Door Intercom Adapter, the station is not assigned as you wish, or the magnetic lock does not stay unlocked for the duration you wish.	The problem may be with the DIP Switch settings on the back of the module: Please confirm that the DIP Switches on the back of the Door Intercom Adapter are set properly. Refer to page 15 for instructions on setting them properly.
Other problems.	Make sure that you have followed the instructions in this User's Guide. If you continue to have problems, call TMC's toll-free customer support line at 1-800-TMC-1638.

Section Page **3A** 26 Step 1: Connect Line Cords 27 Step 2: Set DIP Switches to **Proper Positions** Installing 28 Step 3: Connect Power Cord Your Step 4: Connect Music Source 29 **Music on Hold Adapter**

Step 1: Connect Line Cords

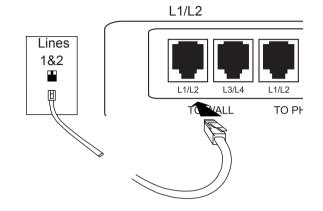
1 Connect First Line Cord

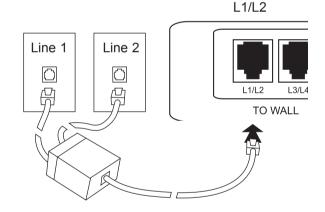
Connect one end of a long telephone line cord to the jack on the back of the feature module labeled L1/L2. Connect the other end to the jack(s) labeled Lines 1 & 2 either:

directly to the wall jack if it is a two-line RJ14 jack

OR

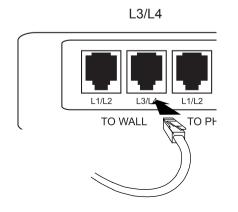
to a two-line coupler (not provided) if you have two single-line RJ11 jacks for lines 1 and 2. Then connect the two cords of the coupler to the corresponding wall jacks. Two-line couplers are available many places, for example Radio Shack (part #279-401).





2 Connect Second Line Cord

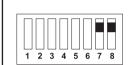
Connect one end of a long telephone line cord to the jack on the back of the feature module labeled L3/L4. Connect the other end to the jack(s) labeled Lines 3 & 4 in the same manner as described in the previous step.



Step 2: Set DIP Switches to Proper Positions

Set Switches 7-8

Set switch 7 in the up position and switch 8 in the up position to set this feature module as a Music on Hold Adapter.

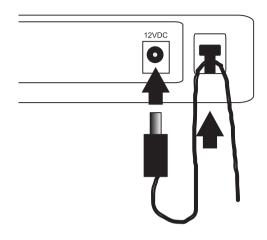


IMPORTANT: Make sure that switch 7 is set in the up position and switch 8 is set in the up position.

Step 3: Connect Power Cord

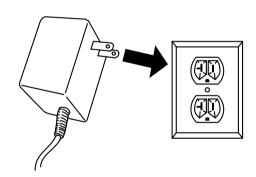
1 Connect Power Cord to Module

Plug the AC power cord into the adapter jack at the rear of the Feature Module. Thread the power cord around the strain relief tab.



2 Connect Power Cord to Wall Outlet

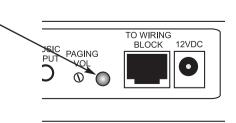
Plug the AC adapter into an electrical outlet **not controlled by a wall switch**.



2 Make Sure that Status Indicator lamp is Blinking

This indicates that the feature module is properly connected to electrical power.

The blinking pattern for the Music on Hold Adapter is a continuous rapid on and off blinking.



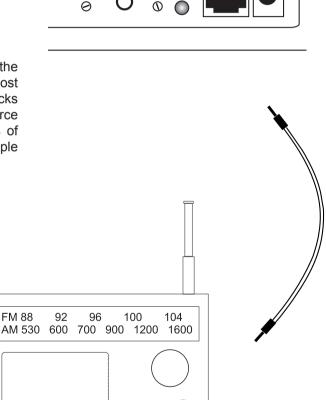
Step 4: Connect Music Source

1 Connect Audio Cable to Module

Plug one end of the supplied audio cable (with 1/8" plugs at each end) into the Music Input Jack on the rear of the feature module.

2 Connect Audio Cable to Music Source

Plug the other end of the audio cable into the music output jack of your music source. Most radio and tape players are equipped with jacks for 1/8" plugs. However, if your music source has a different type of jack, various types of connectors are sold many places, for example Radio Shack.



MUSIC

INPUT

MUSIC

VOL

PAGING

VOL

TO WIRING

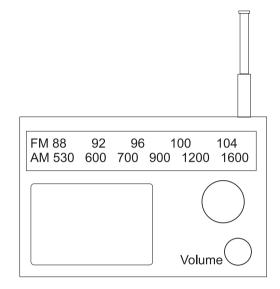
BLOCK

12VDC

	Section
Providing Music to Callers on Hold	3B
Providing a Recorded Message to Callers on Hold	Using Your
Adjusting Music Volume	Music on
Usage Notes	Hold
Troubleshooting Guide	Adapter
	Providing Music to Callers on Hold Providing a Recorded Message to Callers on Hold Adjusting Music Volume Usage Notes

Providing Music to Callers on Hold

You may use your Music on Hold adapter to provide music to callers on hold. Simply tune a radio to a favorite station and attach it to your Music on Hold adapter.

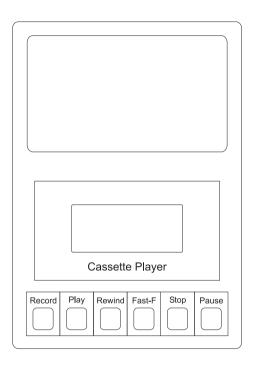


Providing a Recorded Message to Callers on Hold

You may instead choose to use your Music on Hold adapter to provide a recorded message to callers on hold. Simply record the desired message and then attach a tape cassette player to your Music on Hold adapter. Be sure to record your message on a continuous-loop cassette.

Continuous-loop cassettes are sometimes hard to find in stores. If you wish, you may order one directly from TMC Corporation. Simply call 1-800-TMC-1638 to order. Tapes are available in 30 second, 1 minute, 3 minute, and 6 minute lengths.

Note that there are many companies that specialize in providing professional music and messages for callers on hold. If you have such a tape produced, simply place this in your tape player, attach it to your Music on Hold adapter, and you're all set.



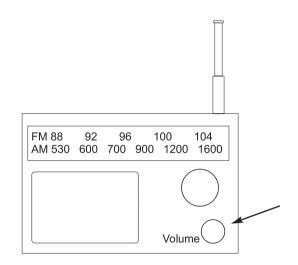
Adjusting Music Volume

1 Listen to Music on Hold Volume

At the system phone nearest the Music on Hold adapter use Line 1 to call the telephone number of Line 2. When Line 2 starts ringing, place Line 1 on hold, and answer Line 2. You should now be hearing the music on hold. Listen to the volume level of the music on hold.

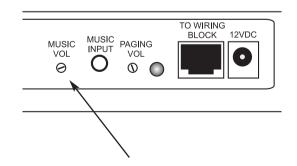
2 Adjust the Volume of the Music Source

Use the volume control of the radio or tape player to achieve your desired music on hold volume level.



3 If Necessary, use the Module's Volume Control Knob

If you find that you cannot achieve the desired volume level by adjusting the volume of the radio or tape player, then use the volume control on the rear of the Feature Module. Using a small screw driver, turn the knob clockwise to increase the volume, or counter-clockwise to decrease the volume.



Usage Notes

Your Music on Hold Adapter must be used in a system of **at least two** system telephones in order for it to work. It will not work if you only have one system telephone installed.

Note: Users of equipment that rebroadcasts copyrighted music or other material may be required to obtain a license from a third party such as ASCAP or BMI.

Troubleshooting Guide

If you are having difficulty with your Music on Hold Adapter, **DO NOT RETURN IT!** You may find your problem and solution listed below. If not, call TMC's toll-free customer support line at 1-800-TMC-1638, and an expert will walk you through your problem. You may also use this toll-free line if you ever have a question that is not answered in your User's Guide.

The Feature Module does not work, and the callers do not hear any music when you place them on hold.	Check all connections and make sure that they are securely in place. Make sure that the AC adapter is plugged into a jack not controlled by a wall switch. Check to make sure that the status indicator lamp is blinking . If it is not, unplug and then replug the AC power cord. If the status indicator still fails to start blinking, check your wall jack by plugging another device such as a lamp into the outlet to make sure that the outlet is working properly.
The Feature Module is connected properly, but still the remote party does not hear any music when you place them on hold. (Note: Please check to make	The problem may be with the telephone wiring: If possible, check your jack wiring by testing a telephone at the jack where you installed the Feature Module. If this standard telephone does not work, then local telephone company lines or your own wiring may be causing the problem.
sure that at least two system telephones are connected, as there must be at least two system phones connected for the music on hold adapter to function.)	The problem may be with your music source: Useful test: Your Music on Hold Adapter has a built-in test feature to check whether your music source is the problem. Simply unplug the 1/8" plug from the music input jack at the rear of the of the adapter. Then place a call and put the caller on hold. The caller should hear music from the Adapter's built-in music chip. If they do, but hear nothing when you plug in your music source, then the problem is with your music source. Make sure that your music source is working properly.
	The problem may be with the volume setting: Refer to page 34 for instructions on adjusting the volume setting.
Other problems.	Make sure that you have followed the instructions in this User's Guide. If you continue to have problems, call TMC's toll-free customer support line at 1-800-TMC-1638.

Additional Information

Warranty Information

TWO-YEAR LIMITED WARRANTY

We urge you to complete the Warranty Registration Form enclosed with your product and send it in. This will enable you receive future updates and product information from *TMC*.

What does your warranty cover?

Any defect in material or workmanship.

For how long after the original purchase?

Two years.

What will TMC do?

We will repair or, at our option, replace your **TMC** product at no charge to you. If we repair your product, we may use new or reconditioned replacement parts. If we choose to replace your product, we may replace it with a new or reconditioned one of the same or of a similar design. The exchange unit will be warranted for the remainder of your product's original two-year warranty period.

How do you make a warranty claim?

Call TMC to receive a Return Authorization Number. Properly pack your unit, and write the Return Authorization Number on the outside of the box. Do not include the cords etc. which were originally provided with the product unless specifically requested to do so by the TMC representative. Include in the package a copy of the sales receipt or other proof of the date of original purchase. Also print your name, address, phone number, and a detailed description of the defect or operating problem. Ship the product standard UPS or equivalent (you must prepay all shipping costs) to:

TMC Corporation, Product Service Center, 2540 Route 130, Unit 117, Cranbury, NJ 08512 After repairing or replacing your *TMC* product, we will ship it back to you at no cost to you.

What does this warranty not cover?

- Customer instruction. Your User's Guide provides information regarding installation, operating instructions and user controls. For additional information, ask your dealer.
- Defects resulting from accidents, alterations, unauthorized repair, failure to follow instructions, misuse, neglect, fire, floods, lightning, and acts of God.
- Product which has been modified or incorporated into other products.
- Product purchased or serviced outside the U.S.

We do not warrant your *TMC* products to be compatible with any particular telephone equipment or party line, key telephone systems, or more sophisticated customer premises switching systems.

Neither do we warrant your **TMC** products to function properly in all user environments, since wiring and other factors can affect performance.

Limitations and Exclusions

This warranty is the only one we offer for your **TMC** product, and it sets forth all our responsibilities regarding your **TMC** product. There are no other express warranties.

TMC CORPORATION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Additional Information

FCC Information

This equipment complies with Part 68 of the FCC rules. On the base of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

The FCC requires that you connect your feature module to the telephone network through a modular telephone outlet or jack, which must comply with FCC part 68 rules. The modular telephone outlet or jack to which your feature module must be connected is a USOC RJ11C or RJ14C.

The REN is used to determine the quantity of devices which may be connected to the telephone line. The REN for your feature module is 0.1. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If the terminal equipment feature module causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify you as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with your feature module, please contact *TMC Corporation* at 1-800-TMC-1638 for repair and/or warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved. Do not attempt to repair or modify this equipment. Please contact *TMC Corporation* for information on obtaining service for this product.

This equipment cannot be used on public coin service provided by the telephone company. Connection to Party Line Service is subject to state tariffs. (Contact the state public utility commission, public service commission or corporation commission for information.)

Additional Information

FCC Information (Continued)

Warning: Your feature module generates and uses R.F. (Radio Frequency) energy. It complies with FCC Part 15, Subpart J for Class B computing devices. If not used in strict accordance with manufacturer's instructions, the feature module can cause interference to radio and/or television reception. The rules with which it must comply afford reasonable protection against interference when used in most locations. However, there can be no guarantee that such interference will not occur in a particular installation. In the event that such interference does occur, make sure this unit is the source of interference. To do so, disconnect the feature module from the telephone line and unplug it from the AC wall outlet. If interference is still present, this unit is not the source of R.F. If this does stop the interference, proceed as follows:

- 1. Reorient or relocate the receiving antenna on the unit experiencing interference.
- 2. Move the feature module away from the unit experiencing interference.
- 3. Plug the unit experiencing interference into a different AC wall outlet.

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. The following booklet, prepared by the Federal Communications Commission, may be helpful:

"How to Identify and Resolve Radio-Television Interference Problems"

The booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-0345-4.

TMC Corporation 2540 Route 130, Unit 117 Cranbury, NJ 08512 609-860-1830 Toll-free 1-800-TMC-1638 Fax 609-860-8980 www.tmccorporation.com Email: info@tmccorporation.com

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